This is a collection of steps that I used, with a few alterations and changes for my specific needs, in order to set up my Plex server using Ubuntu 16.04.

In all the commands that are listed you can substitute the user “plex” for your specific user, be sure to also replace “plex” in all of the paths that are listed.

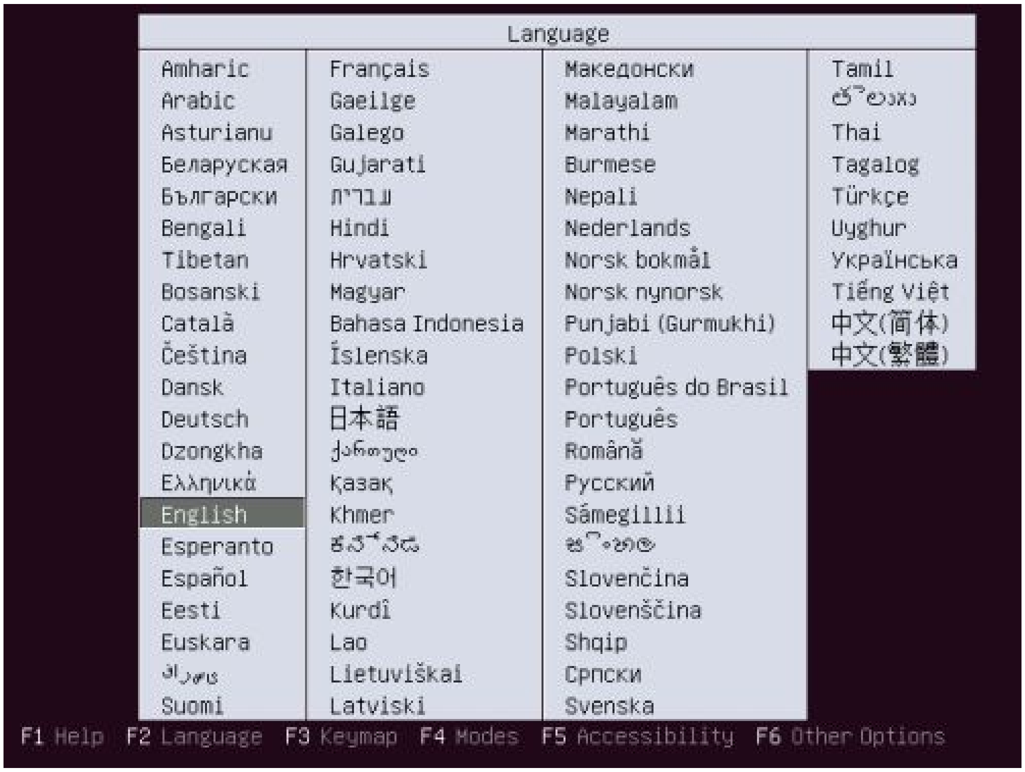
The guides should show the most recent version of the programs, you will want to check the provided sites to ensure that you have the most up to date version of the program. All of the instruction should still be the same.

How To Setup A Headless Media Server Using Ubuntu 16.04 and Plex Software

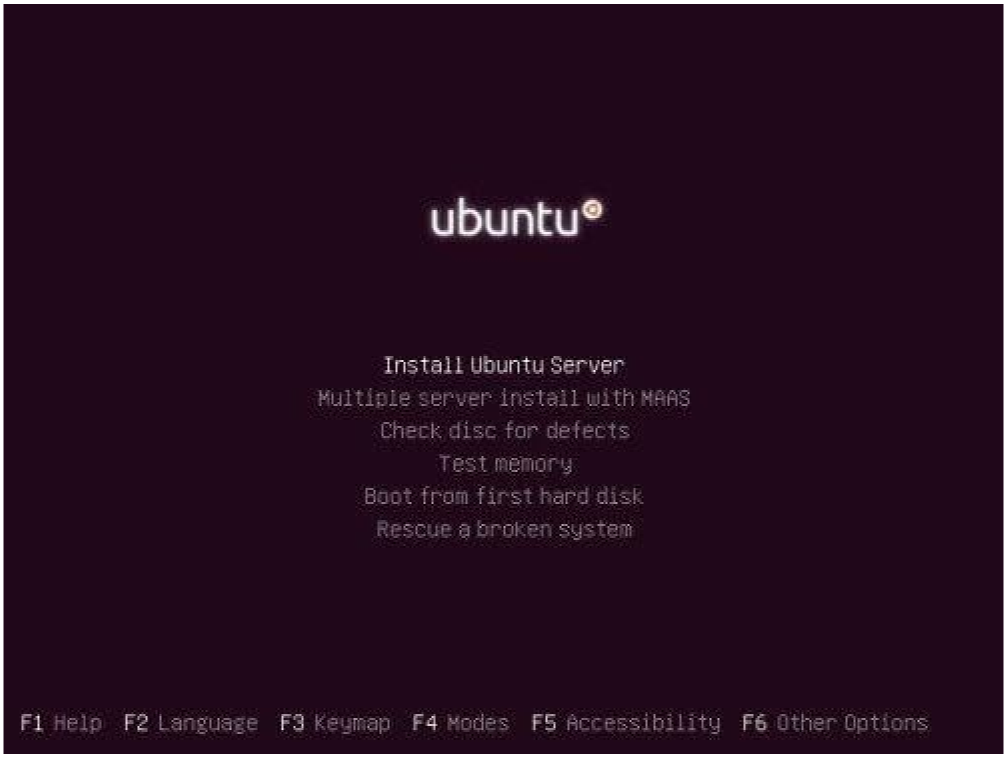
Pre-Install:
Power on your machine and set your BIOS settings to boot from CD/DVD.

After doing so, insert your Ubuntu DVD installer and boot from it. When your machine successfully booted up, you’ll be prompted with a menu, similar to the image shown below

Step 1: Select Installer Language

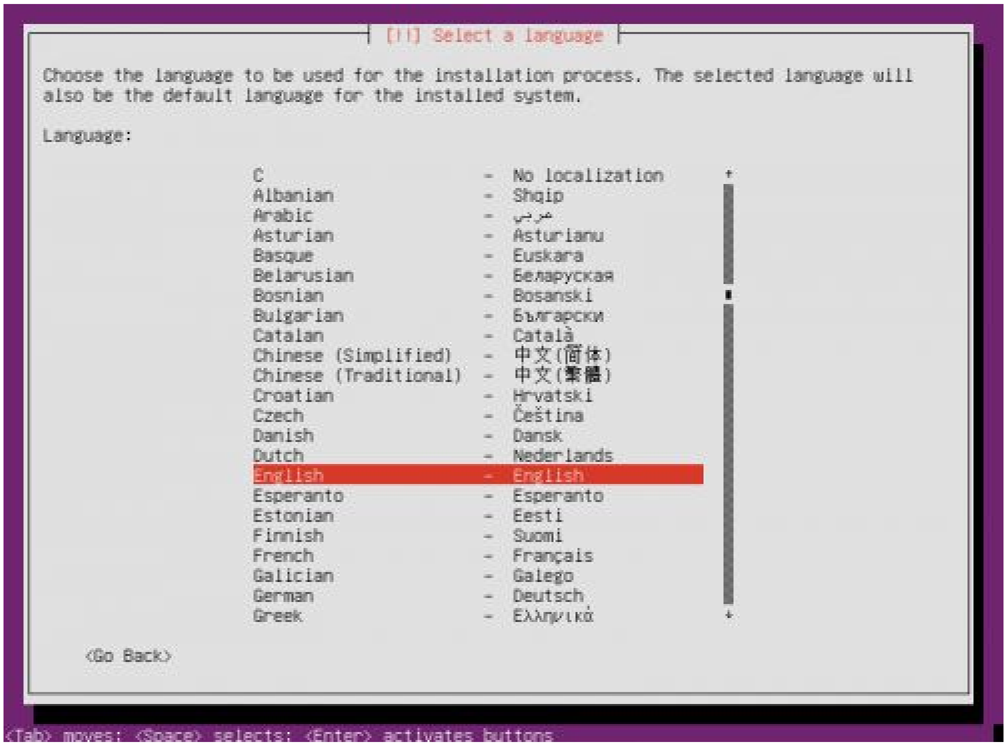


Step 2: Select Install Ubuntu Server 16.04



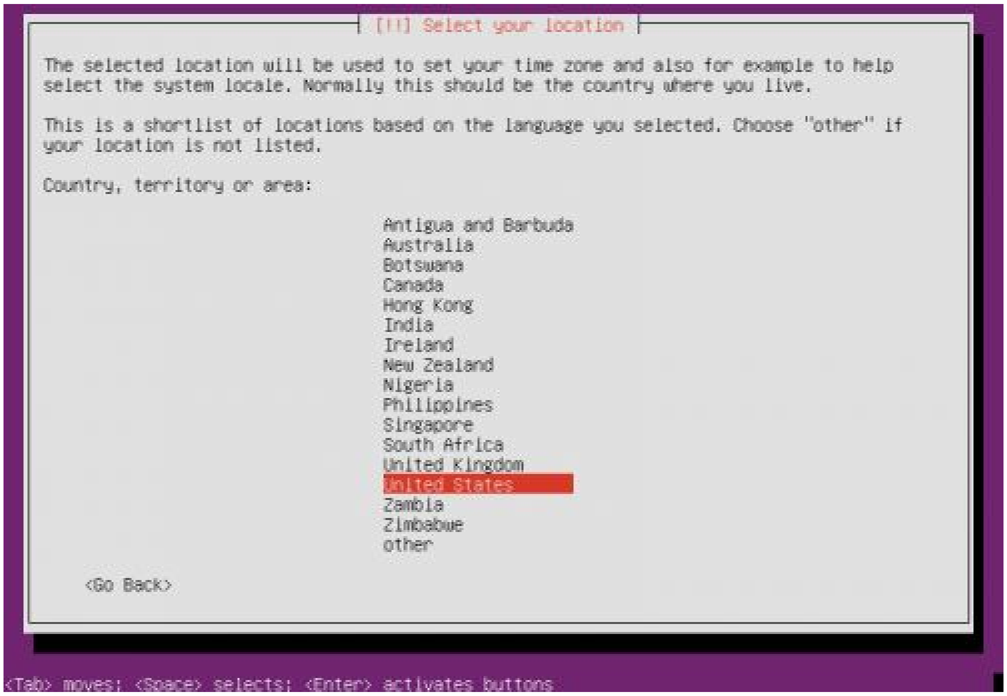
```
ubuntu

Install Ubuntu Server
Multiple server install with MAAS
Check disc for defects
Test memory
Boot from first hard disk
Rescue a broken system

F1 Help  F2 Language  F3 Keymap  F4 Modes  F5 Accessibility  F6 Other Options
```

Step 3: Select the Operating System Language



```
[!!] Select a language

Choose the language to be used for the installation process. The selected language will
also be the default language for the installed system.

Language:

                    C                        -  No localization
                    Albanian                 -  Shqip
                    Arabic                   -  عربي
                    Asturian                 -  Asturianu
                    Basque                   -  Euskara
                    Belarusian               -  Беларуская
                    Bosnian                  -  Bosanski
                    Bulgarian                -  Български
                    Catalan                  -  Català
                    Chinese (Simplified)     -  中文(简体)
                    Chinese (Traditional)    -  中文(繁體)
                    Croatian                 -  Hrvatski
                    Czech                    -  Čeština
                    Danish                   -  Dansk
                    Dutch                    -  Nederlands
                    English                  -  English
                    Esperanto                -  Esperanto
                    Estonian                 -  Eesti
                    Finnish                  -  Suomi
                    French                   -  Français
                    Galician                 -  Galego
                    German                   -  Deutsch
                    Greek                    -  Ελληνικά

    <Go Back>

<Tab> moves; <Space> selects; <Enter> activates buttons
```

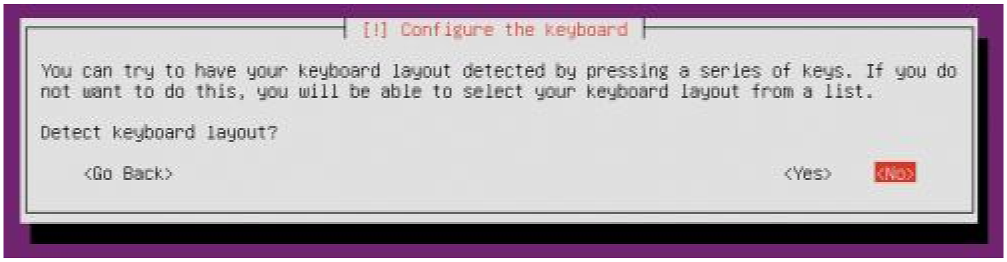
Step 4: Select the Server Location



```
[!!] Select your location

The selected location will be used to set your time zone and also for example to help
select the system locale. Normally this should be the country where you live.

This is a shortlist of locations based on the language you selected. Choose "other" if
your location is not listed.

Country, territory or area:

                                  Antigua and Barbuda
                                  Australia
                                  Botswana
                                  Canada
                                  Hong Kong
                                  India
                                  Ireland
                                  New Zealand
                                  Nigeria
                                  Philippines
                                  Singapore
                                  South Africa
                                  United Kingdom
                                  United States
                                  Zambia
                                  Zimbabwe
                                  other

    <Go Back>

<Tab> moves; <Space> selects; <Enter> activates buttons
```

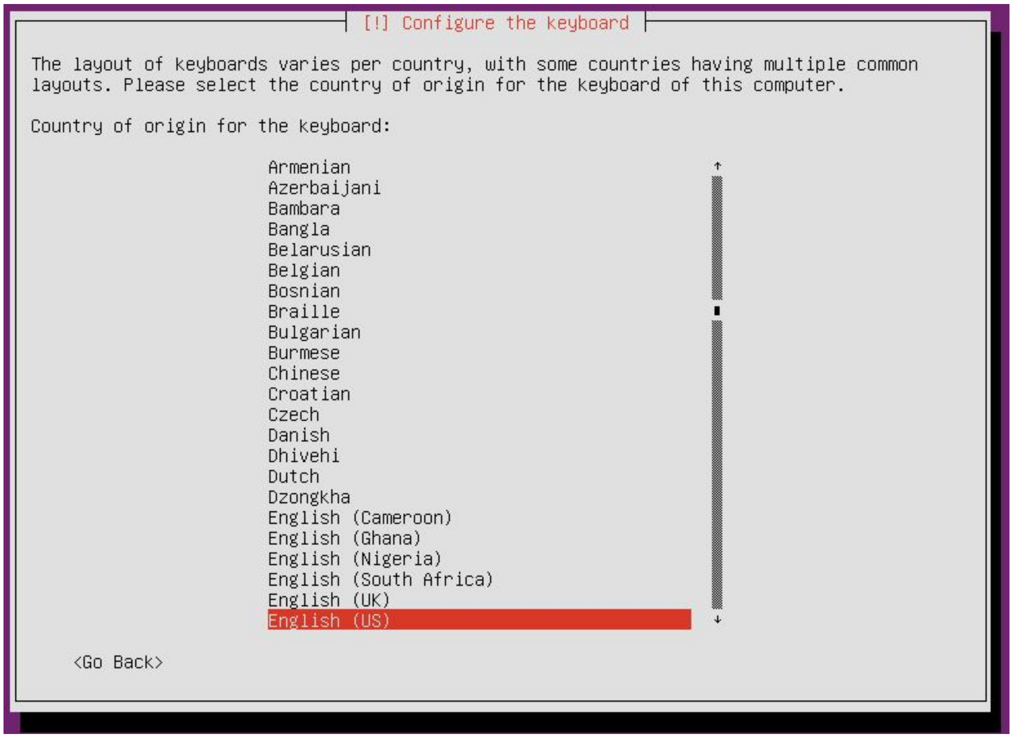
Step 5: Keyboard Detection

Select no unless you have a custom keyboard configuration you need to select separately.



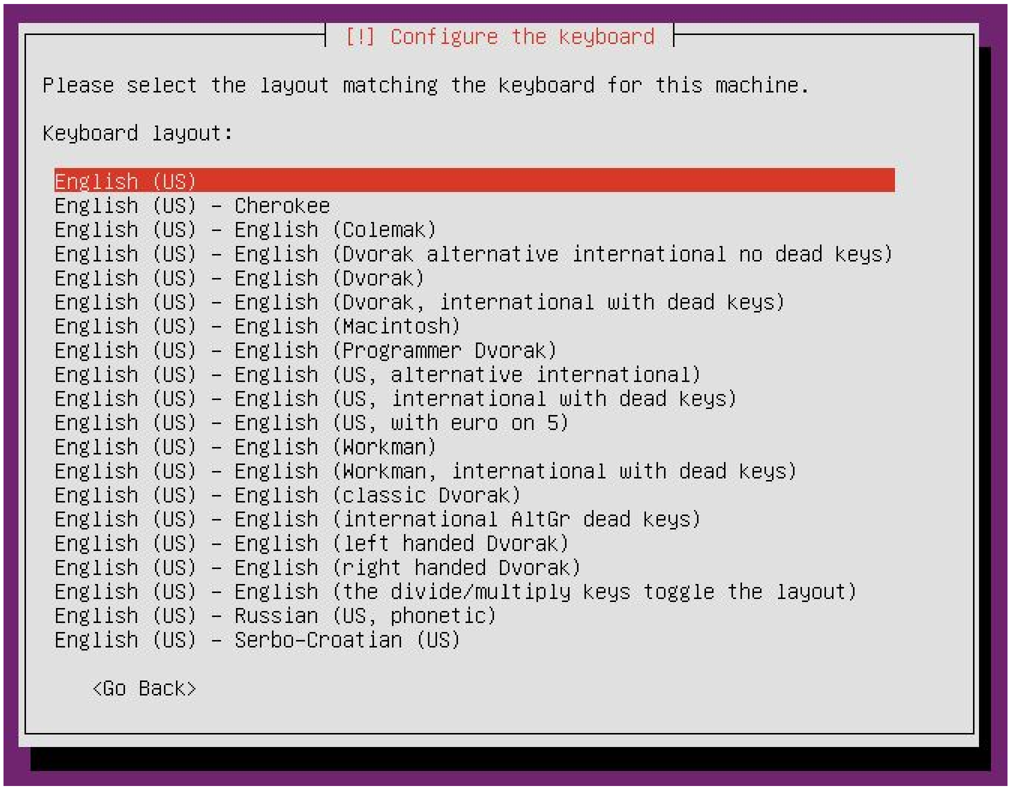
```
[!] Configure the keyboard

You can try to have your keyboard layout detected by pressing a series of keys. If you do
not want to do this, you will be able to select your keyboard layout from a list.

Detect keyboard layout?

    <Go Back>                                                           <Yes>    <No>
```

Select the Country Origin for your keyboard



```
[!] Configure the keyboard

The layout of keyboards varies per country, with some countries having multiple common
layouts. Please select the country of origin for the keyboard of this computer.

Country of origin for the keyboard:

                       Armenian
                       Azerbaijani
                       Bambara
                       Bangla
                       Belarusian
                       Belgian
                       Bosnian
                       Braille
                       Bulgarian
                       Burmese
                       Chinese
                       Croatian
                       Czech
                       Danish
                       Dhivehi
                       Dutch
                       Dzongkha
                       English (Cameroon)
                       English (Ghana)
                       English (Nigeria)
                       English (South Africa)
                       English (UK)
                       English (US)

    <Go Back>
```

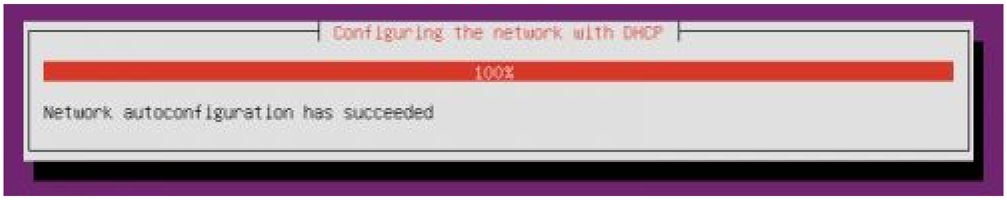
Select the layout for the keyboard.



```
[!] Configure the keyboard

Please select the layout matching the keyboard for this machine.

Keyboard layout:

 English (US)
 English (US) - Cherokee
 English (US) - English (Colemak)
 English (US) - English (Dvorak alternative international no dead keys)
 English (US) - English (Dvorak)
 English (US) - English (Dvorak, international with dead keys)
 English (US) - English (Macintosh)
 English (US) - English (Programmer Dvorak)
 English (US) - English (US, alternative international)
 English (US) - English (US, international with dead keys)
 English (US) - English (US, with euro on 5)
 English (US) - English (Workman)
 English (US) - English (Workman, international with dead keys)
 English (US) - English (classic Dvorak)
 English (US) - English (international AltGr dead keys)
 English (US) - English (left handed Dvorak)
 English (US) - English (right handed Dvorak)
 English (US) - English (the divide/multiply keys toggle the layout)
 English (US) - Russian (US, phonetic)
 English (US) - Serbo-Croatian (US)

    <Go Back>
```

Step 6: Network configuration

The installer will auto detect the network settings. If you are using wireless, you may need to set this up manually.

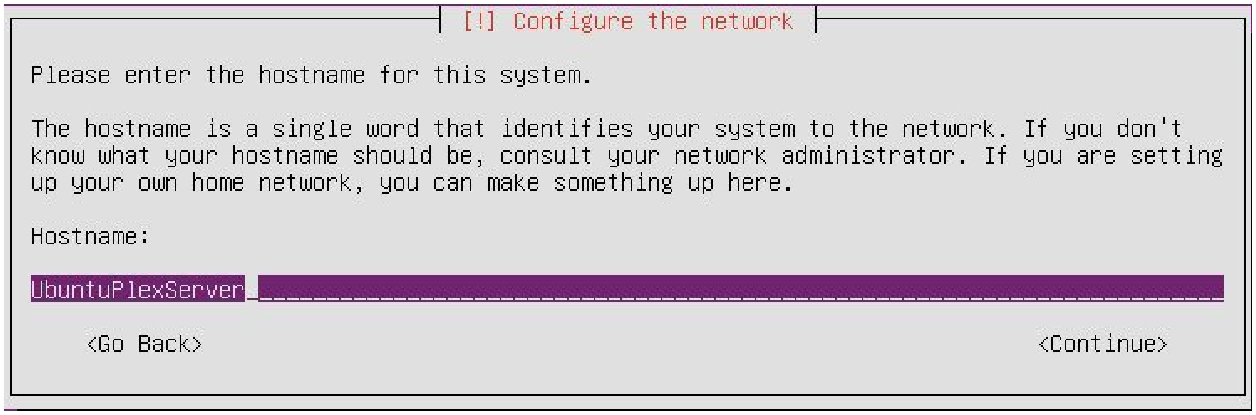


```
Configuring the network with DHCP
100%
Network autoconfiguration has succeeded
```

Step 7: Choose a Hostname

Select a “nickname” for your server.

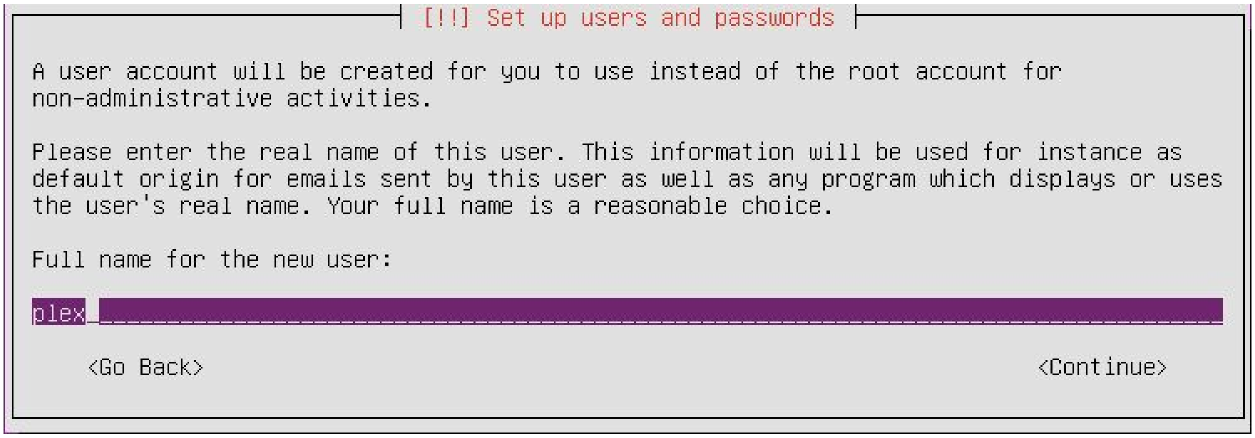
.



```
[!] Configure the network

Please enter the hostname for this system.

The hostname is a single word that identifies your system to the network. If you don't
know what your hostname should be, consult your network administrator. If you are setting
up your own home network, you can make something up here.

Hostname:

UbuntuPlexServer

<Go Back>                                                              <Continue>
```

Step 8: Server User Fullname

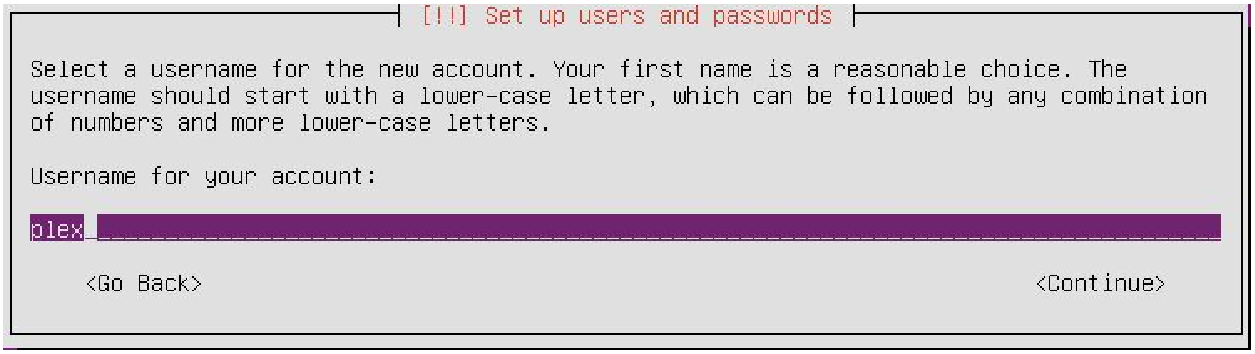
Provide a Fullname for the primary account. This is not the root (administrator) user. This user can temporarily gain admin privileges using `sudo`. You will select the username in the next step.



```
[!!] Set up users and passwords

A user account will be created for you to use instead of the root account for
non-administrative activities.

Please enter the real name of this user. This information will be used for instance as
default origin for emails sent by this user as well as any program which displays or uses
the user's real name. Your full name is a reasonable choice.

Full name for the new user:

plex

<Go Back>                                                              <Continue>
```

Step 9: Server Username

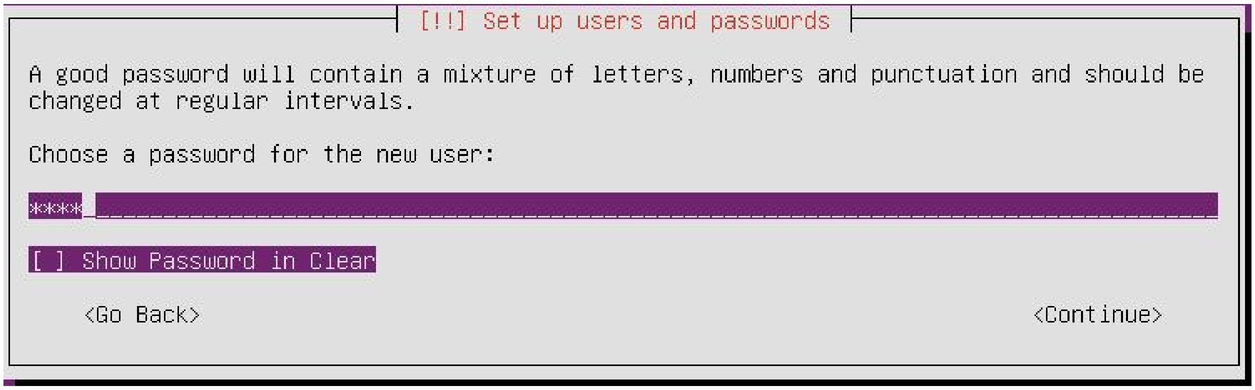
Then provide the login username for the primary account.



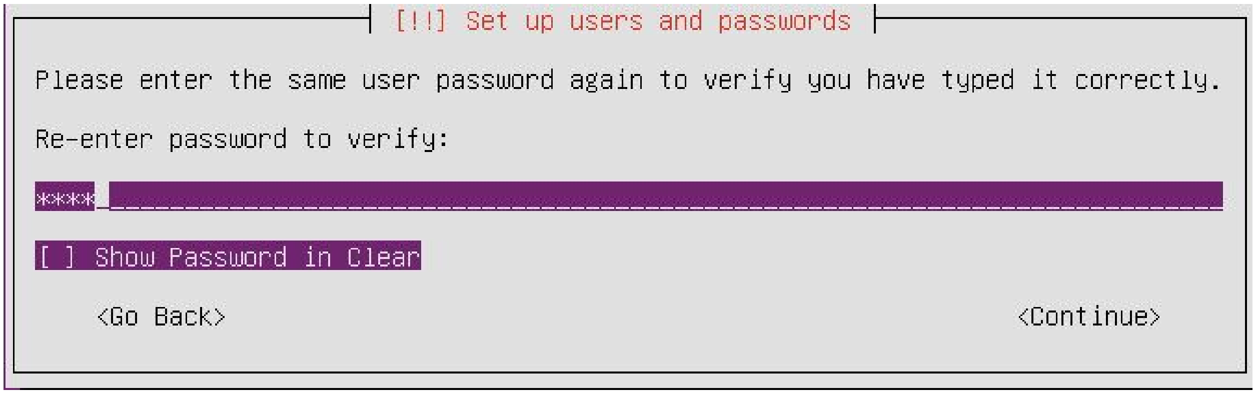
```
[!!] Set up users and passwords

Select a username for the new account. Your first name is a reasonable choice. The
username should start with a lower-case letter, which can be followed by any combination
of numbers and more lower-case letters.

Username for your account:

plex

<Go Back>                                                               <Continue>
```

Step 10: Server Password

Select a password for the user created above. You will have to re-enter the password to confirm.



```
[!!] Set up users and passwords

A good password will contain a mixture of letters, numbers and punctuation and should be
changed at regular intervals.

Choose a password for the new user:

****

[ ] Show Password in Clear

<Go Back>                                                               <Continue>
```

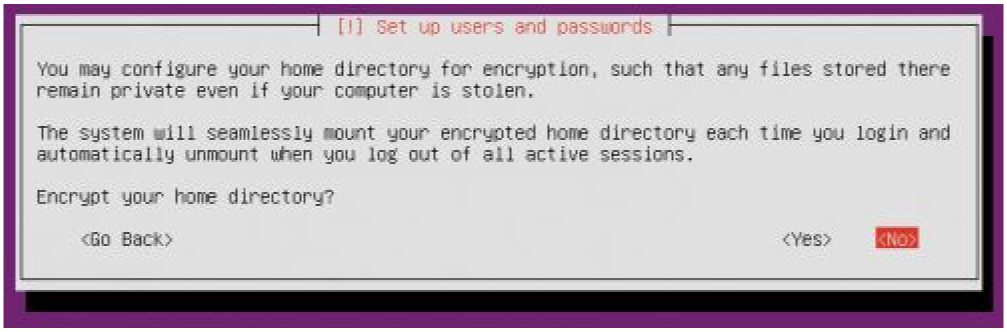


```
[!!] Set up users and passwords

Please enter the same user password again to verify you have typed it correctly.

Re-enter password to verify:

****

[ ] Show Password in Clear

<Go Back>                                                          <Continue>
```

If you are using a weak password there will be 1 more prompt that will ask if you would like to use a stronger password.

Step 11: Home Directory Encryption

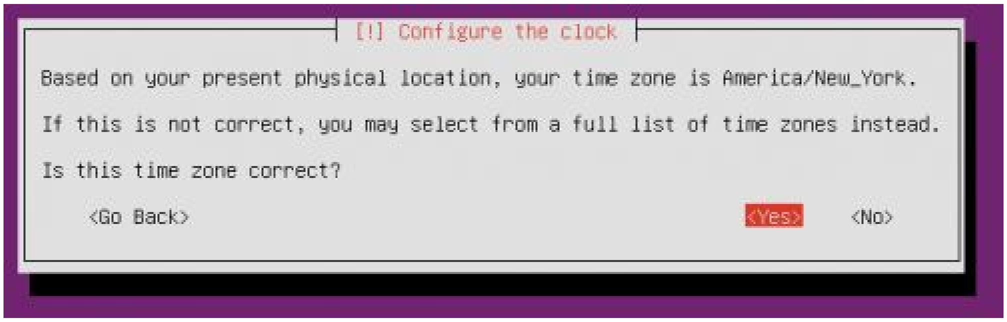
Generally speaking, you do not have to encrypt your home directory. This is up to you whether you would like to or not. I selected No.



```
[!] Set up users and passwords

You may configure your home directory for encryption, such that any files stored there
remain private even if your computer is stolen.

The system will seamlessly mount your encrypted home directory each time you login and
automatically unmount when you log out of all active sessions.

Encrypt your home directory?

    <Go Back>                                                    <Yes>    <No>
```

Step 12: Confirm Timezone

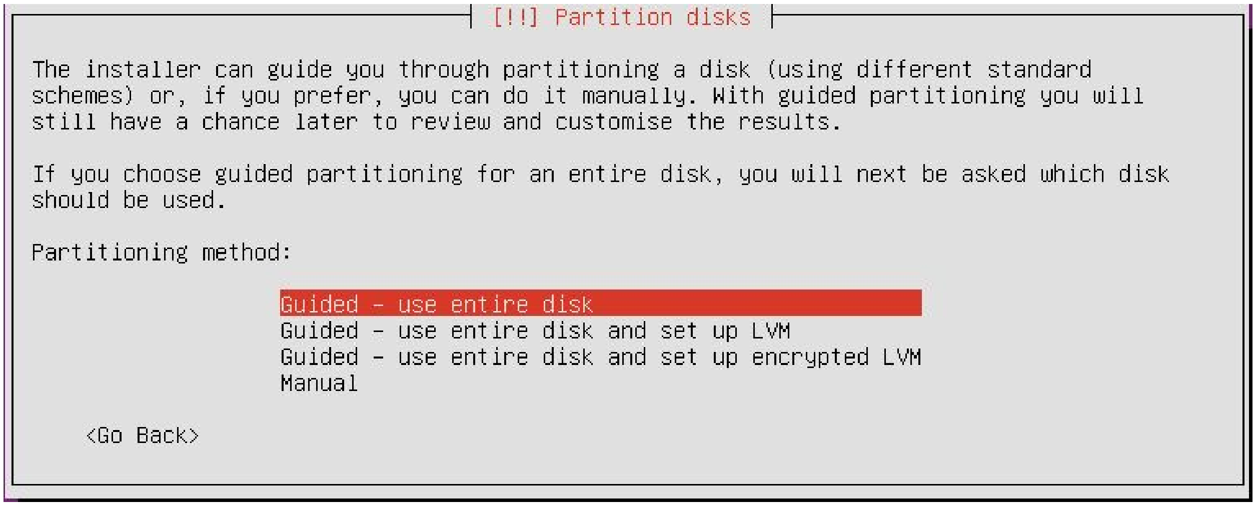
Confirm that the correct timezone is selected.



```
[!] Configure the clock

Based on your present physical location, your time zone is America/New_York.

If this is not correct, you may select from a full list of time zones instead.

Is this time zone correct?

    <Go Back>                                                  <Yes>    <No>
```

Step 13: Ubuntu Server Drive Partitioning

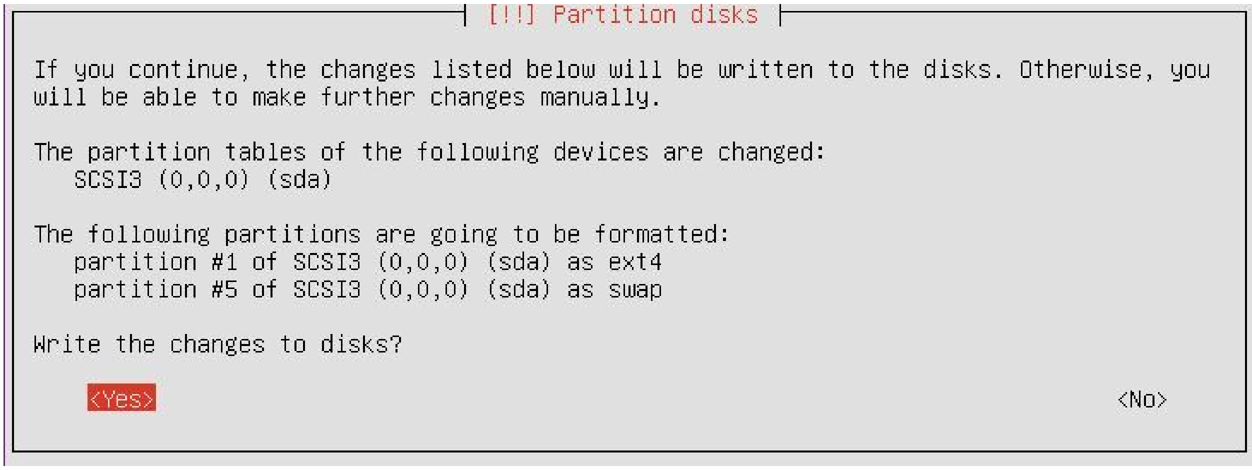
I selected “Guided - use entire disk. I have a 1TB SSD dedicated for the OS, and will create a volume of other HDD for the storage that I combined later once everything else was set up.



```
[!!] Partition disks

The installer can guide you through partitioning a disk (using different standard
schemes) or, if you prefer, you can do it manually. With guided partitioning you will
still have a chance later to review and customise the results.

If you choose guided partitioning for an entire disk, you will next be asked which disk
should be used.

Partitioning method:

                   Guided - use entire disk
                   Guided - use entire disk and set up LVM
                   Guided - use entire disk and set up encrypted LVM
                   Manual

    <Go Back>
```

Step 14: Write the Partitions to Disk

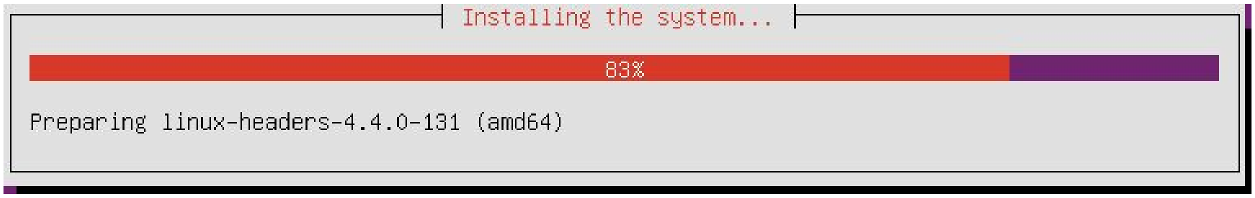
Because partitioning is critical, you will be asked one more time to confirm before partitions will be written to the hard disk.



```
If you continue, the changes listed below will be written to the disks. Otherwise, you
will be able to make further changes manually.

The partition tables of the following devices are changed:
   SCSI3 (0,0,0) (sda)

The following partitions are going to be formatted:
   partition #1 of SCSI3 (0,0,0) (sda) as ext4
   partition #5 of SCSI3 (0,0,0) (sda) as swap

Write the changes to disks?
```

Step 15: Base Ubuntu 16.04 Server Installation

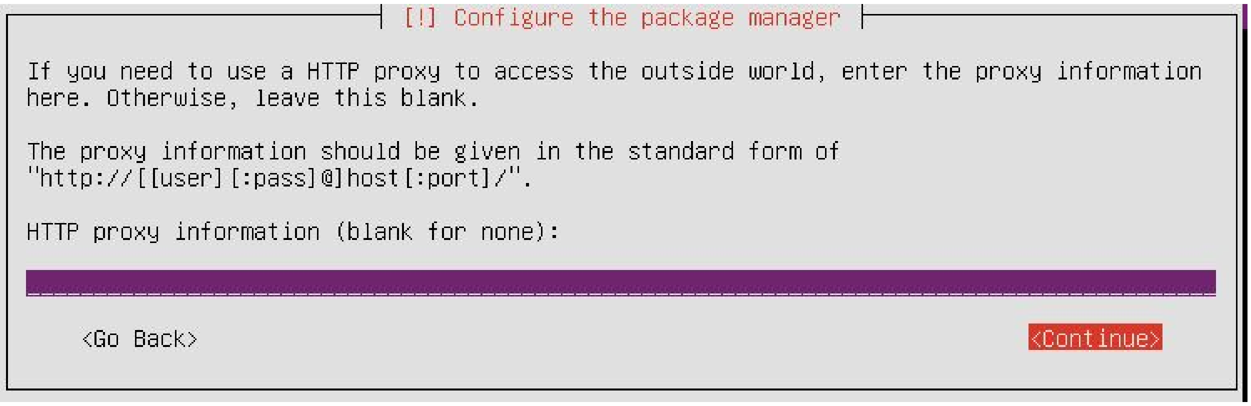
After partitioning, the installer continue to install Ubuntu Server 16.04 base system. Nothing to do here than wait for it to complete.



```
Preparing linux-headers-4.4.0-131 (amd64)
```

Step 16: Setup HTTP Proxy

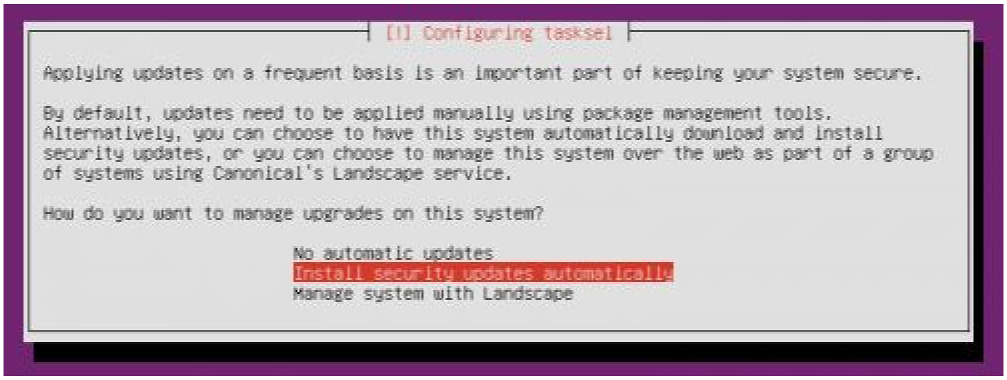
In typical Ubuntu Home Server setup, this is generally not needed. So, leave it blank and continue to install Ubuntu 16.04 Server.



```
If you need to use a HTTP proxy to access the outside world, enter the proxy information
here. Otherwise, leave this blank.

The proxy information should be given in the standard form of
"http://[[user][:pass]@]host[:port]/".

HTTP proxy information (blank for none):
```

Step 17: Setup Automatic Updates

Ubuntu Server can automatically install updates when they are available. While this can break things sometimes installing just the security updates shouldn't. So I recommend installing security updates automatically on your Ubuntu home server.

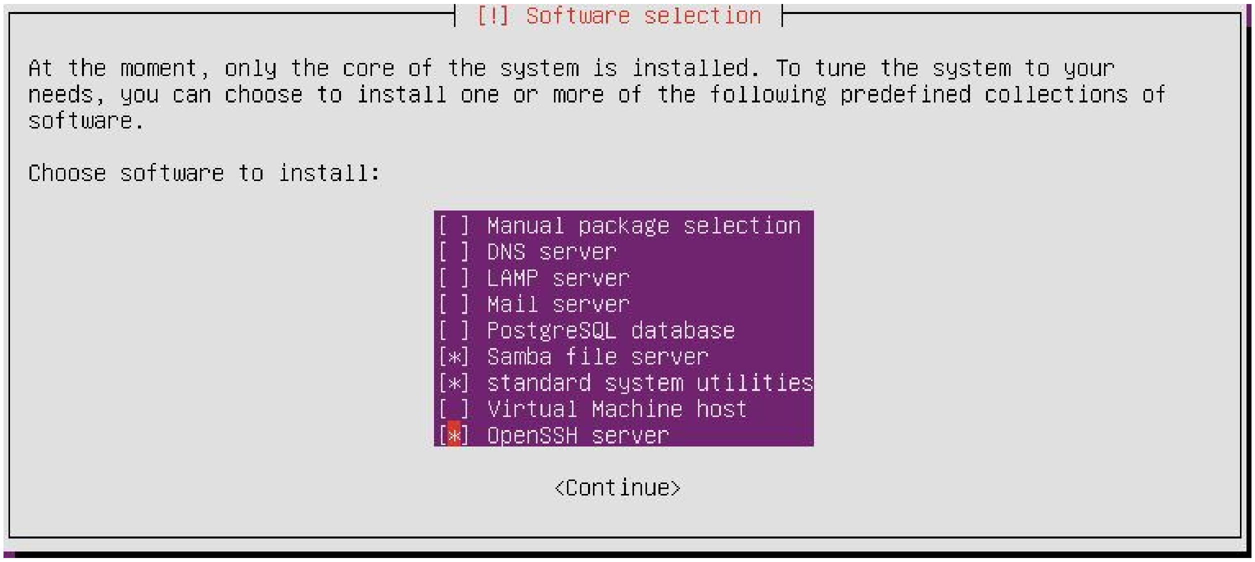


```
[!] Configuring tasksel

Applying updates on a frequent basis is an important part of keeping your system secure.

By default, updates need to be applied manually using package management tools.
Alternatively, you can choose to have this system automatically download and install
security updates, or you can choose to manage this system over the web as part of a group
of systems using Canonical's Landscape service.

How do you want to manage upgrades on this system?

                         No automatic updates
                         Install security updates automatically
                         Manage system with Landscape
```

When non-security updates are available, you will see a notification upon login and you can force an update using `sudo apt-get upgrade` command.

Step 18: Ubuntu Server Tasksel

After partitioning, this is the step that requires most user intervention. You will have to select what services you want to install on your Ubuntu 16.04 Server. "Standard System Utilities" should already be selected. In addition, for a typical Ubuntu homeserver setup, I recommend Sambe file server and OpenSSH server as well.

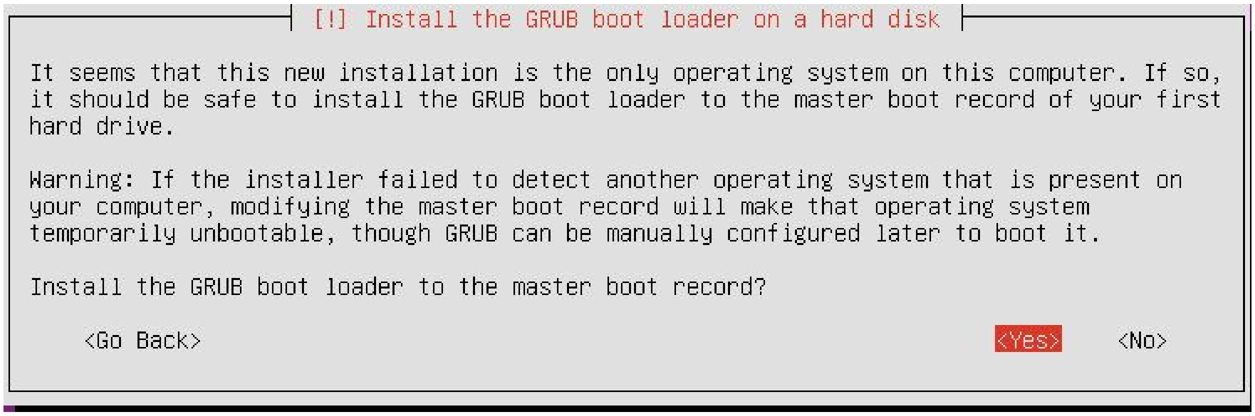


```
[!] Software selection

At the moment, only the core of the system is installed. To tune the system to your
needs, you can choose to install one or more of the following predefined collections of
software.

Choose software to install:

                              [ ] Manual package selection
                              [ ] DNS server
                              [ ] LAMP server
                              [ ] Mail server
                              [ ] PostgreSQL database
                              [*] Samba file server
                              [*] standard system utilities
                              [ ] Virtual Machine host
                              [*] OpenSSH server

                                    <Continue>
```

Samba will allow you to use shared drives to connect with other computers to add/remove files on and off of the server where OpenSSH Server will allow you to remote into the box rather than requiring you to have a monitor and keyboard always connected.

Step 19: GRUB Notification

GRUB is the boot menu that is shown immediately after your Ubuntu Server powers on. It shows a list of all OS installed on the system. It is installed to the hard drive containing the OS. In most cases this is /dev/sda. Select Yes to continue and the installation will continue and finish up.



[!] Install the GRUB boot loader on a hard disk

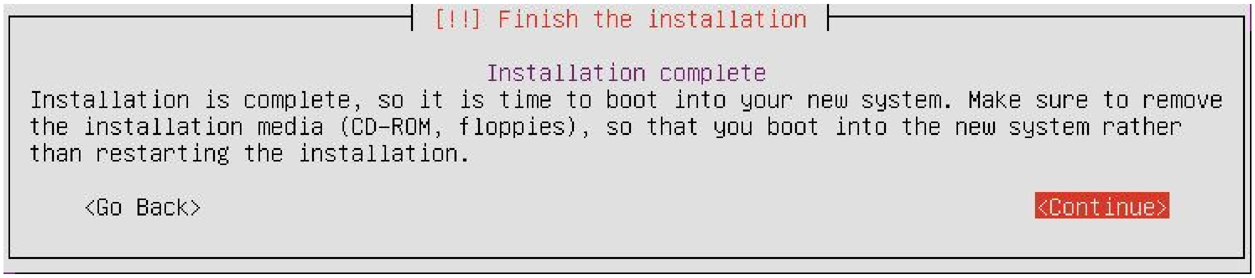
It seems that this new installation is the only operating system on this computer. If so, it should be safe to install the GRUB boot loader to the master boot record of your first hard drive.

Warning: If the installer failed to detect another operating system that is present on your computer, modifying the master boot record will make that operating system temporarily unbootable, though GRUB can be manually configured later to boot it.

Install the GRUB boot loader to the master boot record?

Step 20: Reboot Ubuntu Server

And the Installation is complete! Hit Enter to reboot and you will then be prompted to log in with the information we set up in steps 9 and 10..



[!!] Finish the installation

Installation complete

Installation is complete, so it is time to boot into your new system. Make sure to remove the installation media (CD-ROM, floppies), so that you boot into the new system rather than restarting the installation.

Step 21: Update Ubuntu and Security settings

Run `sudo apt-get update`

```
sudo apt-get upgrade -y
sudo apt dist-upgrade -y
```

Step 22: Reboot!

Type in `sudo reboot`

Setup and Install SSH

If you did not install OpenSSH Server from the above you can also install the same way here. If you did install as part of the installation package, go ahead and skip to Step 2.

Step 1: Install Open-SSH

Inside your Ubuntu Terminal type in `sudo apt-get install openssh-server`

Step 2: Modify the SSH Configuration

Type in `sudo nano /etc/ssh/sshd_config` and modify the configuration to what yours needs are for the ssh. I have highlighted the 2 items that I personally changed for security of my own server. Port so that I am not using the default port and which users are allowed to use SSH.

```
# Package generated configuration file
# See the sshd_config(5) manpage for details

# What ports, IPs and protocols we listen for
Port 3333
# Use these options to restrict which interfaces/protocols sshd will bind to
#ListenAddress ::
#ListenAddress 0.0.0.0
Protocol 2
# HostKeys for protocol version 2
HostKey /etc/ssh/ssh_host_rsa_key
HostKey /etc/ssh/ssh_host_dsa_key
HostKey /etc/ssh/ssh_host_ecdsa_key
HostKey /etc/ssh/ssh_host_ed25519_key
#Privilege Separation is turned on for security
UsePrivilegeSeparation yes
AllowUsers plex
```

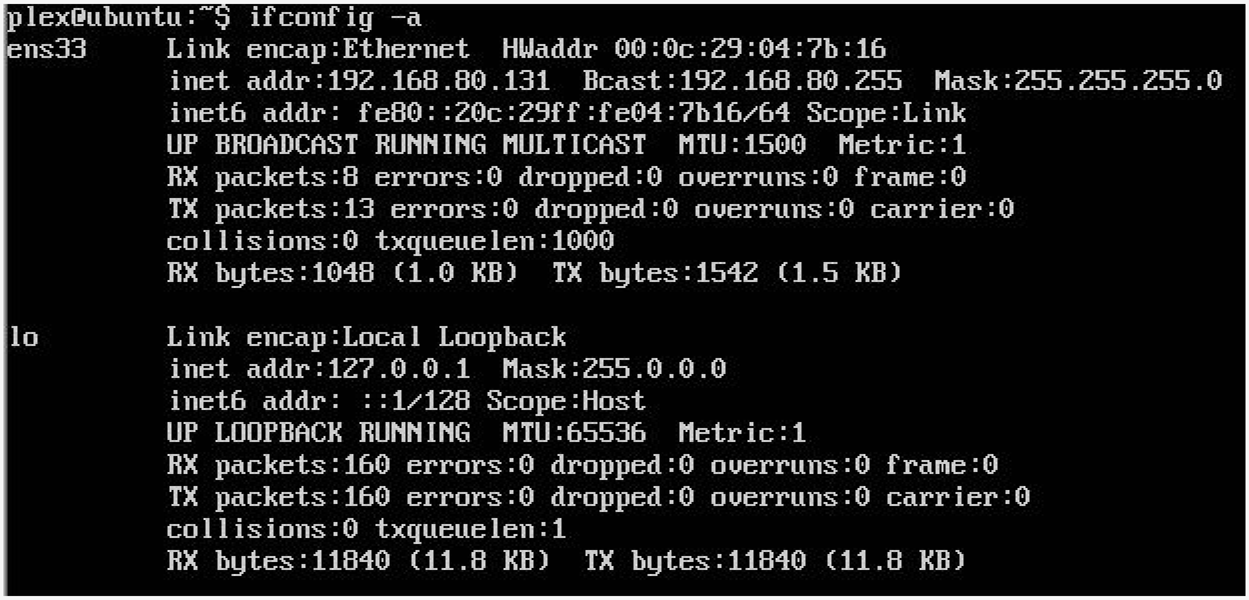
Step 3: Restart the SSH Service

Type in `sudo service ssh restart`

Set Static IP Address for the Server

Step 1: Find the interface you need to use.

Type in `ifconfig -a`



```
plex@ubuntu:~$ ifconfig -a
ens33     Link encap:Ethernet  HWaddr 00:0c:29:04:7b:16
          inet addr:192.168.80.131  Bcast:192.168.80.255  Mask:255.255.255.0
          inet6 addr: fe80::20c:29ff:fe04:7b16/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:8 errors:0 dropped:0 overruns:0 frame:0
          TX packets:13 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:1048 (1.0 KB)  TX bytes:1542 (1.5 KB)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:160 errors:0 dropped:0 overruns:0 frame:0
          TX packets:160 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1
          RX bytes:11840 (11.8 KB)  TX bytes:11840 (11.8 KB)
```

`For this we will use ens33 as the interface that we will set the IP for.`

Step 2: Edit the Interfaces file

Type in `sudo nano /etc/network/interfaces`

```
iface <interface> inet static
      address 192.168.0.100
      netmask 255.255.255.0
      gateway 192.168.0.1
      dns-nameservers 8.8.8.8 8.8.4.4
```

For the <interface> we will set that to the ens33. For the dns-nameservers, the above is the google dns, however, if you do know your own information from your provider, you will want to use that information.

Step 3: Restart the service or the Server

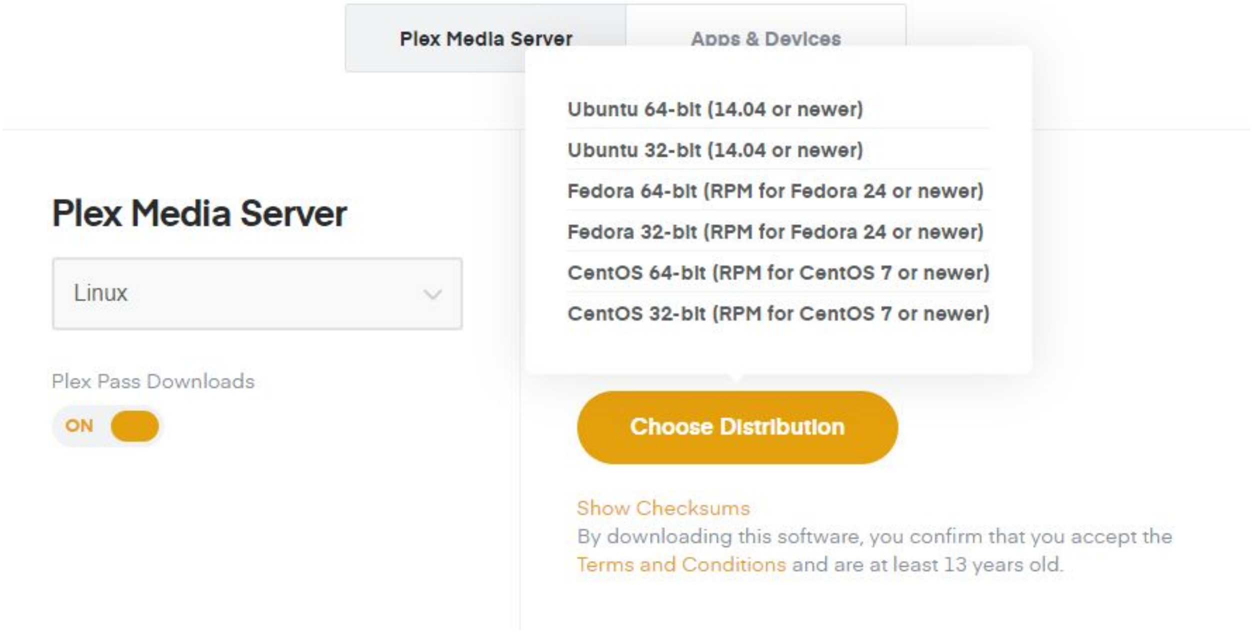
Type in `sudo /etc/init.d/networking restart` to restart the service or `sudo reboot` to restart the entire server

At this point you will be able to use that Static IP for the SSH. For example if this was your server you could use Putty.exe and use the IP 192.168.0.100:3333 to SSH in as long as you are on your local network. You can obtain Putty from http://www.putty.org

Plex Installation

Step 1: Obtain the Download File

Go to https://www.plex.tv/media-server-downloads/ and select the platform as Linux, then click on ‘Choose Distribution’

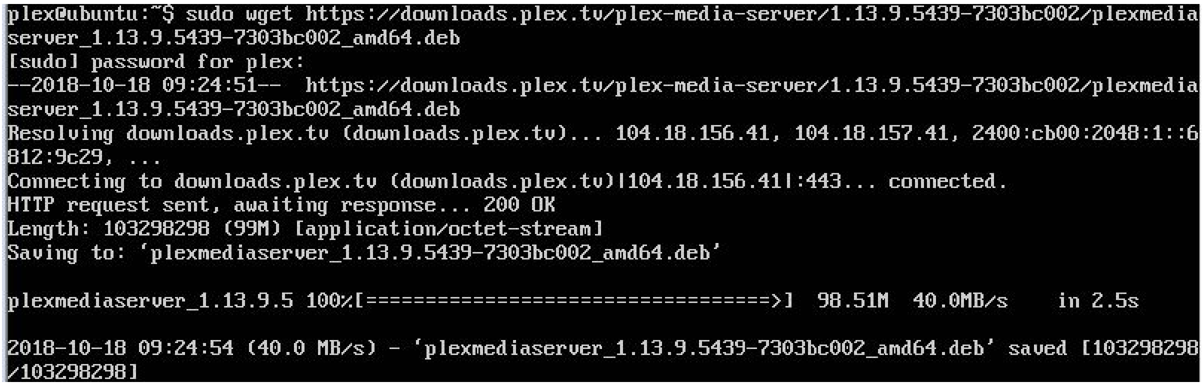

Plex Media Server
Apps & Devices
Ubuntu 64-bit (14.04 or newer)
Ubuntu 32-bit (14.04 or newer)
Fedora 64-bit (RPM for Fedora 24 or newer)
Fedora 32-bit (RPM for Fedora 24 or newer)
CentOS 64-bit (RPM for CentOS 7 or newer)
CentOS 32-bit (RPM for CentOS 7 or newer)
Plex Media Server
Linux
Plex Pass Downloads
ON
Choose Distribution
Show Checksums

By downloading this software, you confirm that you accept the Terms and Conditions and are at least 13 years old.

Right click on Ubuntu 64-bit (14.04 or newer) and click on ‘copy link address’

Step 2: Download the Install File

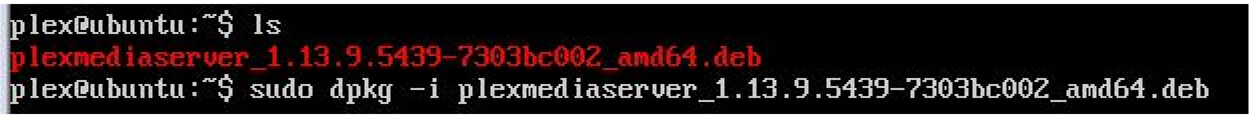
Type in sudo wget <paste the link you copied from Step 1> (You can see the full command how it looks in the image below.



```
plex@ubuntu:~$ sudo wget https://downloads.plex.tv/plex-media-server/1.13.9.5439-7303bc002/plexmedia
server_1.13.9.5439-7303bc002_amd64.deb
[sudo] password for plex:
--2018-10-18 09:24:51--  https://downloads.plex.tv/plex-media-server/1.13.9.5439-7303bc002/plexmedia
server_1.13.9.5439-7303bc002_amd64.deb
Resolving downloads.plex.tv (downloads.plex.tv)... 104.18.156.41, 104.18.157.41, 2400:cb00:2048:1::6
812:9c29, ...
Connecting to downloads.plex.tv (downloads.plex.tv)|104.18.156.41|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 103298298 (99M) [application/octet-stream]
Saving to: ‘plexmediaserver_1.13.9.5439-7303bc002_amd64.deb’

plexmediaserver_1.13.9.5 100%[=================================>]  98.51M  40.0MB/s    in 2.5s

2018-10-18 09:24:54 (40.0 MB/s) - ‘plexmediaserver_1.13.9.5439-7303bc002_amd64.deb’ saved [103298298
/103298298]
```

Step 3: Install the Package

Type in `sudo dpkg -i <plexmediaserver package just downloaded in Step 2>` You can also type plex then <tab> and it will auto fill the package ending in .deb. Make sure that you are in the same directory that you downloaded the file into when you run this command.



```
plex@ubuntu:~$ ls
plexmediaserver_1.13.9.5439-7303bc002_amd64.deb
plex@ubuntu:~$ sudo dpkg -i plexmediaserver_1.13.9.5439-7303bc002_amd64.deb
```

Step 4: Log into Plex

You should be able to open up your browser and then navigate to http://192.168.0.100:32400/manage we use that IP because that is the one that we set the server up as the static ip. You will want to input whatever IP you set as your Static. You will then be able to claim and set up your Plex Server from that point.

Additional Installation Information

Docker Installation (These steps are the same as listed in the site below)

https://docs.docker.com/install/linux/docker-ce/ubuntu/#install-using-the-repository

Docker is the prerequisite for the containers that the instruction will be following after this installation.

Step 1: Install needed packages for Docker

Type in

```
$ sudo apt-get install \
    apt-transport-https \
    ca-certificates \
    curl \
    software-properties-common
```

Step 2: Add the GPG Key for git

Type in the following,

```
$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -
```

Step 3: Add the Repo that you will obtain Docker-ce from

Type in,

```
sudo add-apt-repository "deb [arch=amd64]
https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable"
```

Step 4: Update the apt package

Type `sudo apt-get update`

Step : Install Docker

Type `sudo apt-get install docker-ce -y`
This will then install the docker for being able to install containers for use.

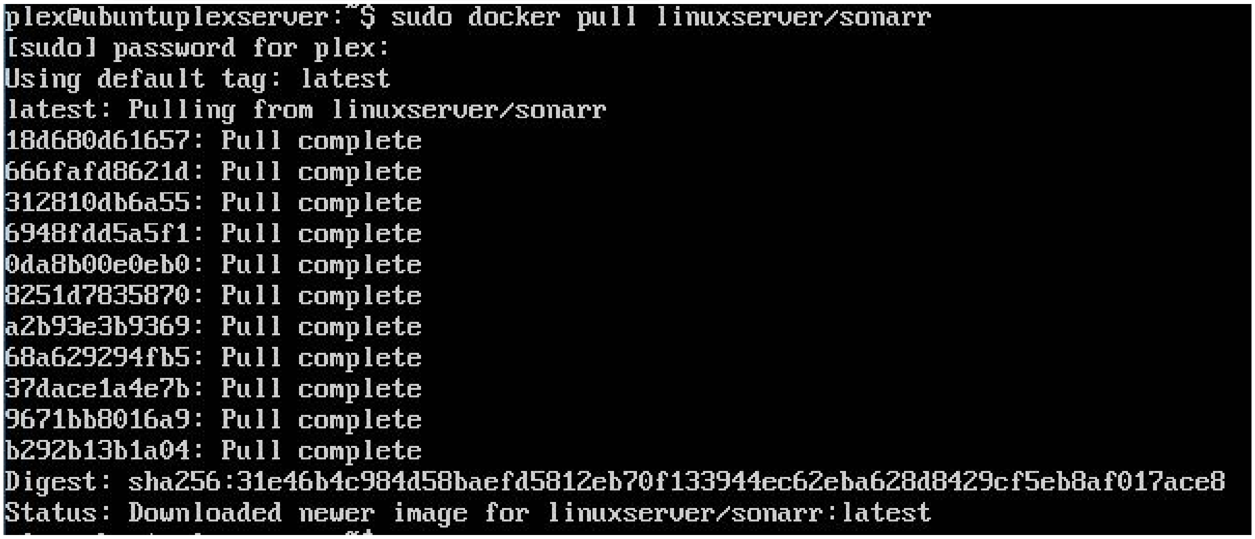
Sonarr Docker Container Installation

https://hub.docker.com/r/linuxserver/sonarr/

Sonarr is a PVR for usenet and bittorrent users. It can monitor multiple RSS feeds for new episodes of your favorite shows and will grab, sort and rename them. It can also be configured to automatically upgrade the quality of files already downloaded when a better quality format becomes available

Step 1: Pull the Container

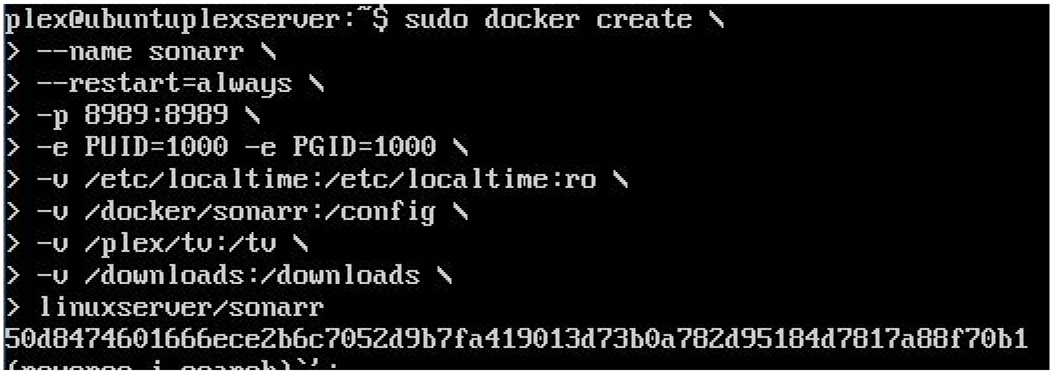
Type in `sudo docker pull linuxserver/sonarr`



```
plex@ubuntuplexserver:~$ sudo docker pull linuxserver/sonarr
[sudo] password for plex:
Using default tag: latest
latest: Pulling from linuxserver/sonarr
18d680d61657: Pull complete
666fafd8621d: Pull complete
312810db6a55: Pull complete
6948fdd5a5f1: Pull complete
0da8b00e0eb0: Pull complete
8251d7835870: Pull complete
a2b93e3b9369: Pull complete
68a629294fb5: Pull complete
37dace1a4e7b: Pull complete
9671bb8016a9: Pull complete
b292b13b1a04: Pull complete
Digest: sha256:31e46b4c984d58baefd5812eb70f133944ec62eba628d8429cf5eb8af017ace8
Status: Downloaded newer image for linuxserver/sonarr:latest
```

Step 2: Type or copy/paste in

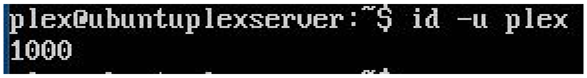
```
sudo docker create \
      --name sonarr \
      --restart=always \
      -p 8989:8989 \
      -e PUID=<user pid> -e PGID=<group id>\
      -v /etc/localtime:/etc/localtime:ro \
      -v <path you would like the config file in>:/config \
      -v <path to where tv library>:/tv \
      -v <path to where downloads are stored>>:/downloads \
linuxserver/sonarr
```



```
plex@ubuntuplexserver:~$ sudo docker create \
> --name sonarr \
> --restart=always \
> -p 8989:8989 \
> -e PUID=1000 -e PGID=1000 \
> -v /etc/localtime:/etc/localtime:ro \
> -v /docker/sonarr:/config \
> -v /plex/tv:/tv \
> -v /downloads:/downloads \
> linuxserver/sonarr
50d8474601666ece2b6c7052d9b7fa419013d73b0a782d95184d7817a88f70b1
```

The image above is an example of what mine looks like fully filled out with the locations that I am using on my server. You will need to create the directories that you are using for the config, tv and downloads.

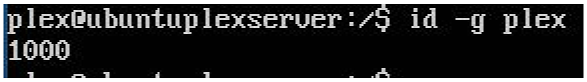
You can find the PUID by typing in `id -u <username>`



```
plex@ubuntuplexserver:~$ id -u plex
1000
```

That is the PUID you will need to enter.

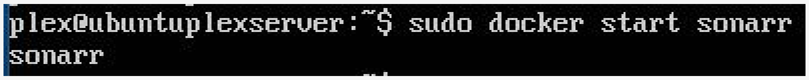
You can find the GID by typing in `id -g <group>`



```
plex@ubuntuplexserver:/$ id -g plex
1000
```

Step 3: Start the Container

Type in `sudo docker start sonarr`



```
plex@ubuntuplexserver:~$ sudo docker start sonarr
sonarr
```

Step 4: Access the Container

You can reach the container by opening your browser and going to http://localhost:8989. Or because we have assigned this server an IP address we could go to another computer and go to the site http://192.168.0.100:8989.

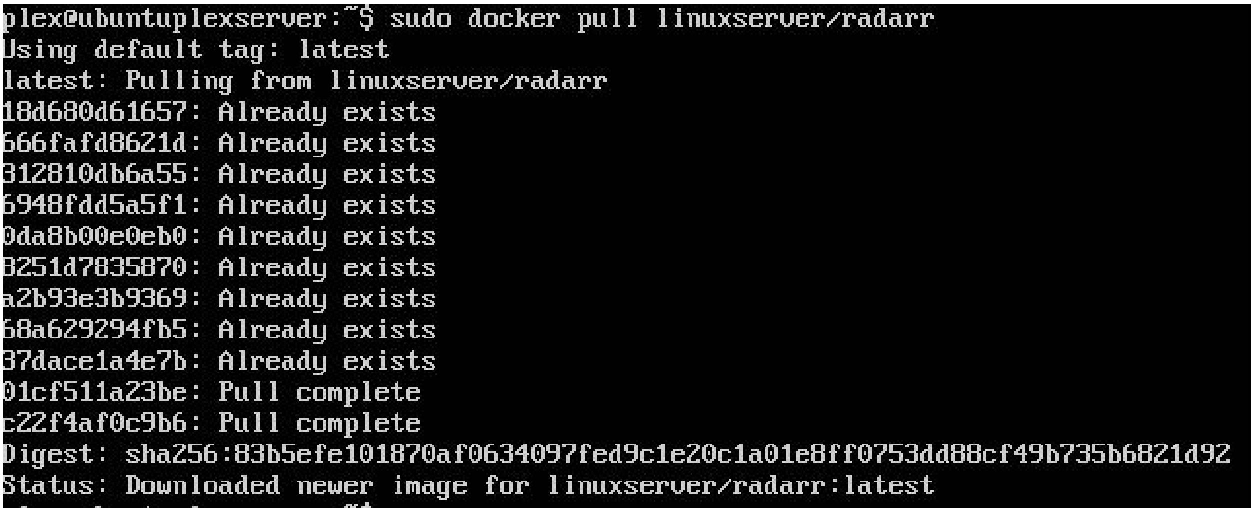
Radarr Docker Container Installation

https://hub.docker.com/r/linuxserver/radarr/

Radarr is a PVR for usenet and bittorrent users. It can monitor multiple RSS feeds for new movies and will grab, sort and rename them. It can also be configured to automatically upgrade the quality of files already downloaded when a better quality format becomes available

Step 1: Pull the Container

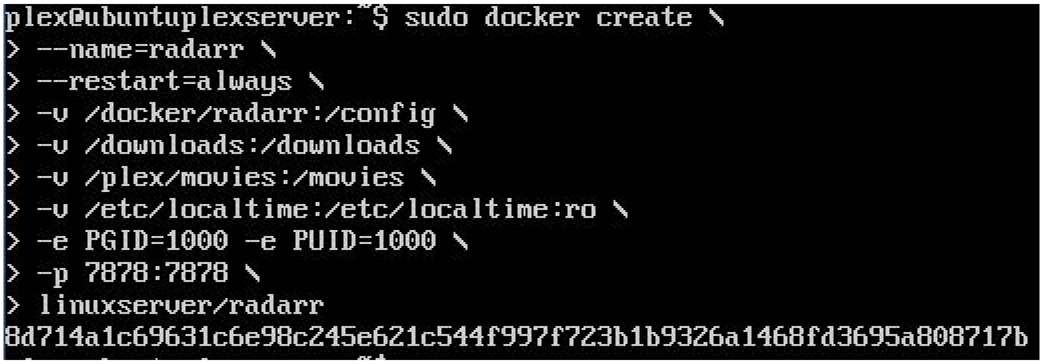
Type in `sudo docker pull linuxserver/radarr`



```
plex@ubuntuplexserver:~$ sudo docker pull linuxserver/radarr
Using default tag: latest
latest: Pulling from linuxserver/radarr
18d680d61657: Already exists
666fafd8621d: Already exists
312810db6a55: Already exists
6948fdd5a5f1: Already exists
0da8b00e0eb0: Already exists
3251d7835870: Already exists
a2b93e3b9369: Already exists
68a629294fb5: Already exists
37dace1a4e7b: Already exists
01cf511a23be: Pull complete
c22f4af0c9b6: Pull complete
Digest: sha256:83b5efe101870af0634097fed9c1e20c1a01e8ff0753dd88cf49b735b6821d92
Status: Downloaded newer image for linuxserver/radarr:latest
```

Step 2: Type or copy/paste in

```
sudo docker create \
       --name radarr \
       --restart=always \
       -p 7878:7878 \
       -e PUID=<user pid> -e PGID=<group id>\
       -v /etc/localtime:/etc/localtime:ro \
       -v <path you would like the config file in>:/config \
       -v <path to where tv library>:/movies \
       -v <path to where downloads are stored>>:/downloads \
       linuxserver/radarr
```

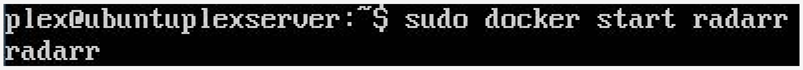


```
plex@ubuntuplexserver:~$ sudo docker create \
> --name=radarr \
> --restart=always \
> -v /docker/radarr:/config \
> -v /downloads:/downloads \
> -v /plex/movies:/movies \
> -v /etc/localtime:/etc/localtime:ro \
> -e PGID=1000 -e PUID=1000 \
> -p 7878:7878 \
> linuxserver/radarr
8d714a1c69631c6e98c245e621c544f997f723b1b9326a1468fd3695a808717b
```

The image above is an example of what mine looks like fully filled out with the locations that I am using on my server. You will need to create the directories that you are using for the config, tv and downloads.

Step 3: Start the Container

Type in `sudo docker start radarr`



```
plex@ubuntuplexserver:~$ sudo docker start radarr
radarr
```

Step 4: Access the Container

You can reach the container by opening your browser and going to http://localhost:7878. Or because we have assigned this server an IP address we could go to another computer and go to the site http://192.168.0.100:7878.

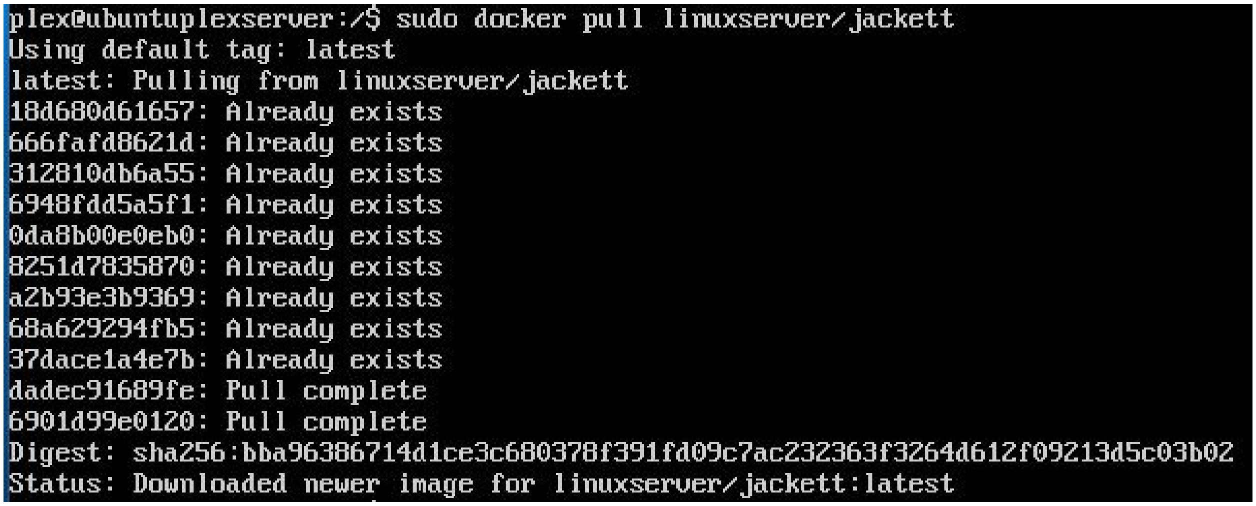
Jackett Docker Container Installation

https://hub.docker.com/r/linuxserver/jackett/

Jackett works as a proxy server: it translates queries from apps (Sonarr, SickRage, CouchPotato, Mylar, etc) into tracker-site-specific http queries, parses the html response, then sends results back to the requesting software. This allows for getting recent uploads (like RSS) and performing searches. Jackett is a single repository of maintained indexer scraping & translation logic - removing the burden from other apps.

Step 1: Pull the Container

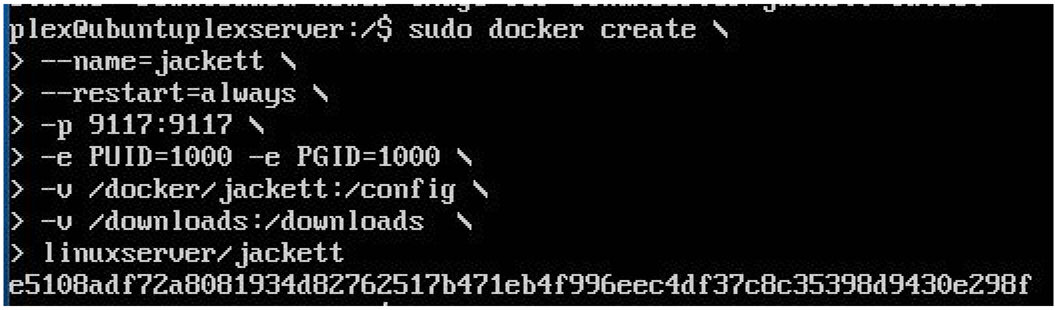
Type in `sudo docker pull linuxserver/jackett`



```
plex@ubuntuplexserver:/$ sudo docker pull linuxserver/jackett
Using default tag: latest
latest: Pulling from linuxserver/jackett
18d680d61657: Already exists
666fafd8621d: Already exists
312810db6a55: Already exists
6948fdd5a5f1: Already exists
0da8b00e0eb0: Already exists
8251d7835870: Already exists
a2b93e3b9369: Already exists
68a629294fb5: Already exists
37dace1a4e7b: Already exists
dadec91689fe: Pull complete
6901d99e0120: Pull complete
Digest: sha256:bba96386714d1ce3c680378f391fd09c7ac232363f3264d612f09213d5c03b02
Status: Downloaded newer image for linuxserver/jackett:latest
```

Step 2: Type or copy/paste in

```
sudo docker create \
      --name=jackett \
      --restart=always \
      -p 9117:9117 \
      -e PUID=<user pid> -e PGID=<group id>\
      -v <path you would like the config file in>:/config \
      -v <path to where downloads are stored>>:/downloads \
      linuxserver/jackett
```

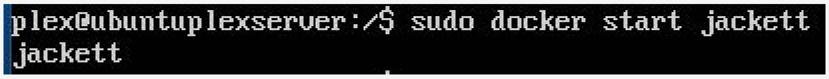


```
plex@ubuntuplexserver:/$ sudo docker create \
> --name=jackett \
> --restart=always \
> -p 9117:9117 \
> -e PUID=1000 -e PGID=1000 \
> -v /docker/jackett:/config \
> -v /downloads:/downloads  \
> linuxserver/jackett
e5108adf72a8081934d82762517b471eb4f996eec4df37c8c35398d9430e298f
```

The image above is an example of what mine looks like fully filled out with the locations that I am using on my server. You will need to create the directories that you are using for the config, tv and downloads.

Step 3: Start the Container

Type in `sudo docker start jackett`



```
plex@ubuntuplexserver:/$ sudo docker start jackett
jackett
```

Step 4: Access the Container

You can reach the container by opening your browser and going to http://localhost:9117. Or because we have assigned this server an IP address we could go to another computer and go to the site http://192.168.0.100:9117.

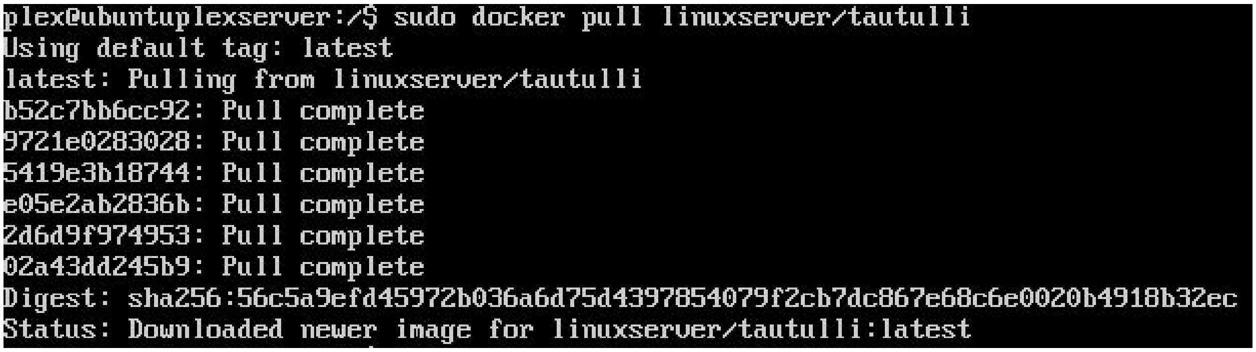
Tautulli Docker Container Installation

https://hub.docker.com/r/linuxserver/tautulli/

Tautulli is a web application for monitoring, analytics and notifications for Plex Media Server.

Step 1: Pull the Container

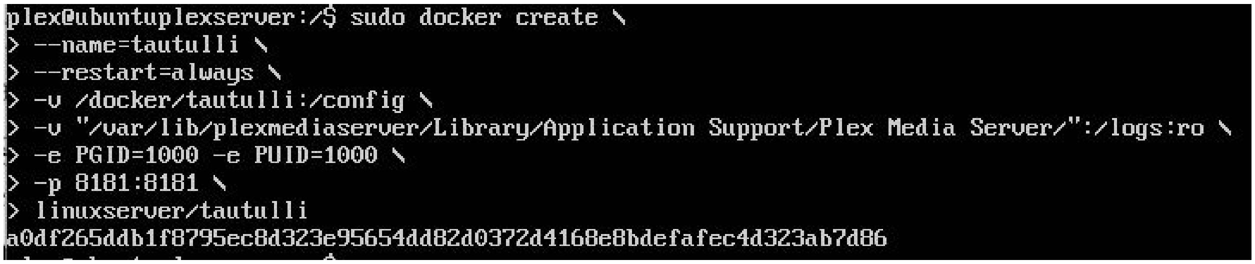
Type in `sudo docker pull linuxserver/tautulli`



```
plex@ubuntuplexserver:/$ sudo docker pull linuxserver/tautulli
Using default tag: latest
latest: Pulling from linuxserver/tautulli
b52c7bb6cc92: Pull complete
9721e0283028: Pull complete
5419e3b18744: Pull complete
e05e2ab2836b: Pull complete
2d6d9f974953: Pull complete
02a43dd245b9: Pull complete
Digest: sha256:56c5a9efd45972b036a6d75d4397854079f2cb7dc867e68c6e0020b4918b32ec
Status: Downloaded newer image for linuxserver/tautulli:latest
```

Step 2: Type or copy/paste in

```
sudo docker create \
      --name=tautulli \
      --restart=always \
      -p 8181:8181 \
      -e PUID=<user pid> -e PGID=<group id>\
      -v <path you would like the config file in>:/config \
      -v <path to the plex logs>:/logs:ro \
      linuxserver/tautulli
```

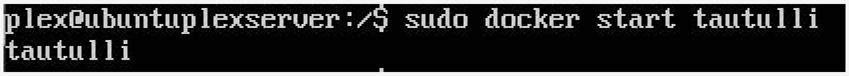


```
plex@ubuntuplexserver:/$ sudo docker create \
> --name=tautulli \
> --restart=always \
> -v /docker/tautulli:/config \
> -v "/var/lib/plexmediaserver/Library/Application Support/Plex Media Server/":/logs:ro \
> -e PGID=1000 -e PUID=1000 \
> -p 8181:8181 \
> linuxserver/tautulli
a0df265ddb1f8795ec8d323e95654dd82d0372d4168e8bdefafec4d323ab7d86
```

The image above is an example of what mine looks like fully filled out with the locations that I am using on my server. You will need to create the directories that you are using for the config, tv and downloads.

Step 3: Start the Container

Type in `sudo docker start jackett`



```
plex@ubuntuplexserver:/$ sudo docker start tautulli
tautulli
```

Step 4: Access the Container

You can reach the container by opening your browser and going to http://localhost:8181. Or because we have assigned this server an IP address we could go to another computer and go to the site http://192.168.0.100:8181.

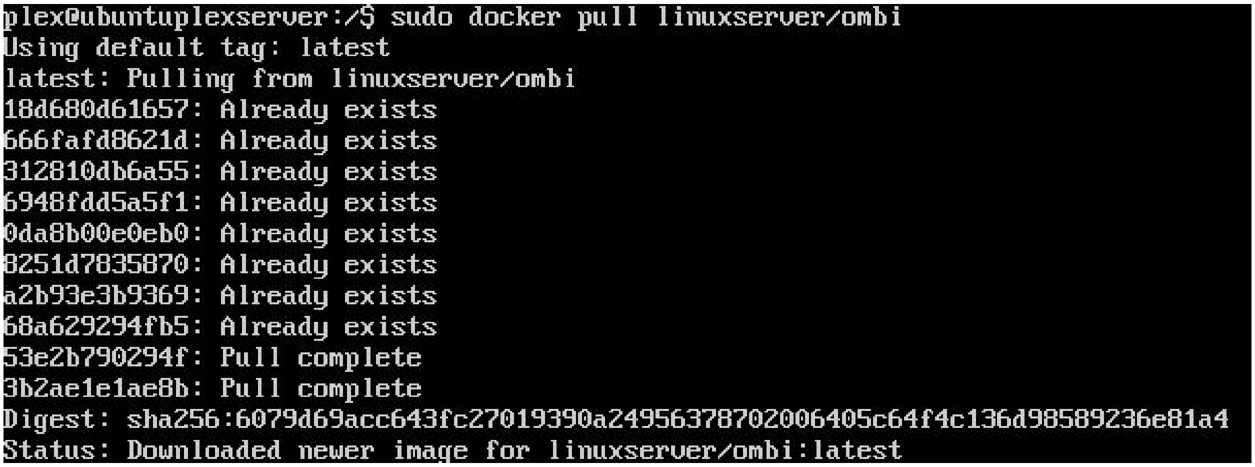
Ombi Docker Container Installation

https://hub.docker.com/r/linuxserver/ombi/

Ombi allows you to host your own Plex Request and user management system.
If you are sharing your Plex server with other users, allow them to request new content using an easy to manage interface!
Manage all your requests for Movies and TV with ease, leave notes for the user and get notification when a user requests something.
Allow your users to post issues against their requests so you know there is a problem with the audio etc.
Even automatically sent them weekly newsletters of new content that has been added to your Plex server!

Step 1: Pull the Container

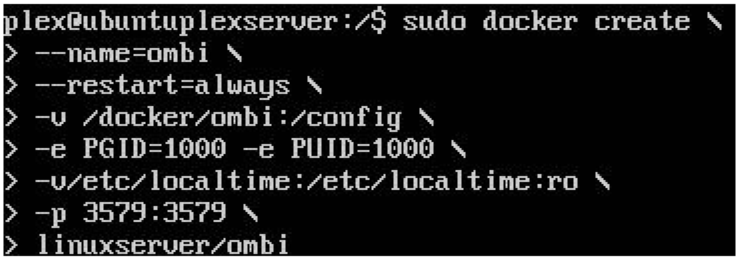
Type in `sudo docker pull linuxserver/ombi`



```
plex@ubuntuplexserver:/$ sudo docker pull linuxserver/ombi
Using default tag: latest
latest: Pulling from linuxserver/ombi
18d680d61657: Already exists
666fafd8621d: Already exists
312810db6a55: Already exists
6948fdd5a5f1: Already exists
0da8b00e0eb0: Already exists
8251d7835870: Already exists
a2b93e3b9369: Already exists
68a629294fb5: Already exists
53e2b790294f: Pull complete
3b2ae1e1ae8b: Pull complete
Digest: sha256:6079d69acc643fc27019390a24956378702006405c64f4c136d98589236e81a4
Status: Downloaded newer image for linuxserver/ombi:latest
```

Step 2: Type or copy/paste in

```
sudo docker create \
      --name=ombi \
      --restart=always \
      -p 3579:3579 \
      -e PUID=<user pid> -e PGID=<group id>\
      -v <path you would like the config file in>:/config \
      -v /etc/localtime:/etc/localtime:ro \
      linuxserver/ombi
```

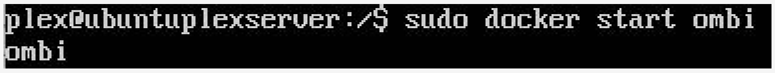


```
plex@ubuntuplexserver:/$ sudo docker create \
> --name=ombi \
> --restart=always \
> -v /docker/ombi:/config \
> -e PGID=1000 -e PUID=1000 \
> -v/etc/localtime:/etc/localtime:ro \
> -p 3579:3579 \
> linuxserver/ombi
```

The image above is an example of what mine looks like fully filled out with the locations that I am using on my server. You will need to create the directories that you are using for the config, tv and downloads.

Step 3: Start the Container

Type in `sudo docker start ombi`



```
plex@ubuntuplexserver:/$ sudo docker start ombi
ombi
```

Step 4: Access the Container

You can reach the container by opening your browser and going to http://localhost:3579. Or because we have assigned this server an IP address we could go to another computer and go to the site http://192.168.0.100:3579.

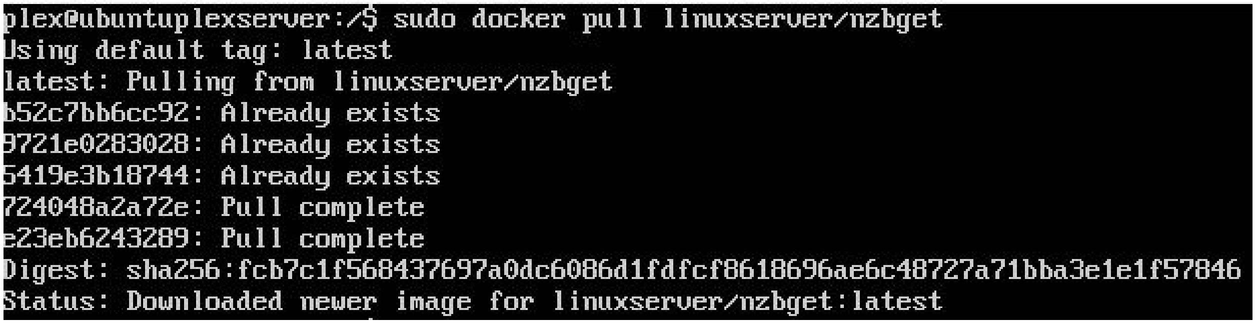
NZBGET Docker Container Installation

https://hub.docker.com/r/linuxserver/nzbget/

NZBGET is a Usenet Downloader

Step 1: Pull the Container

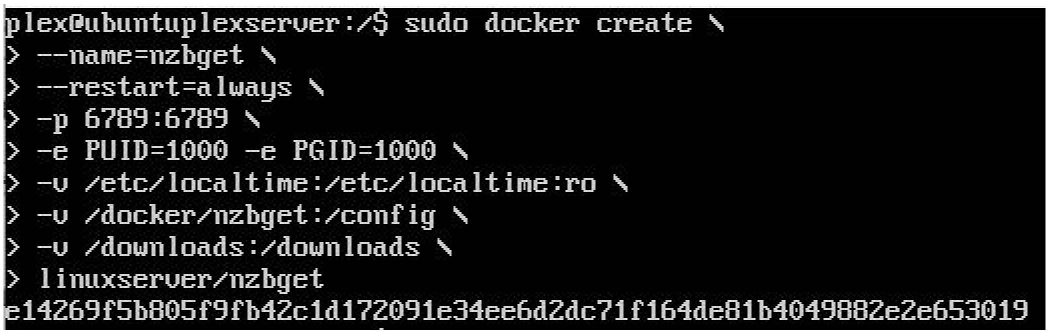
Type in `sudo docker pull linuxserver/nzbget`



```
plex@ubuntuplexserver:/$ sudo docker pull linuxserver/nzbget
Using default tag: latest
latest: Pulling from linuxserver/nzbget
b52c7bb6cc92: Already exists
9721e0283028: Already exists
5419e3b18744: Already exists
724048a2a72e: Pull complete
e23eb6243289: Pull complete
Digest: sha256:fcb7c1f568437697a0dc6086d1fdfcf8618696ae6c48727a71bba3e1e1f57846
Status: Downloaded newer image for linuxserver/nzbget:latest
```

Step 2: Type or copy/paste in

```
sudo docker create \
       --name=nzbget \
       --restart=always \
       -p 6789:6789 \
       -e PUID=<user pid> -e PGID=<group id>\
       -v <path you would like the config file in>:/config \
       -v /etc/localtime:/etc/localtime:ro \
       -v /downloads:/downloads \
       linuxserver/nzbget
```

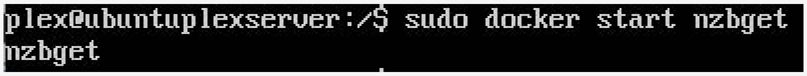


```
plex@ubuntuplexserver:/$ sudo docker create \
> --name=nzbget \
> --restart=always \
> -p 6789:6789 \
> -e PUID=1000 -e PGID=1000 \
> -v /etc/localtime:/etc/localtime:ro \
> -v /docker/nzbget:/config \
> -v /downloads:/downloads \
> linuxserver/nzbget
e14269f5b805f9fb42c1d172091e34ee6d2dc71f164de81b4049882e2e653019
```

The image above is an example of what mine looks like fully filled out with the locations that I am using on my server. You will need to create the directories that you are using for the config, tv and downloads.

Step 3: Start the Container

Type in `sudo docker start nzbget`



```
plex@ubuntuplexserver:/$ sudo docker start nzbget
nzbget
```

Step 4: Access the Container

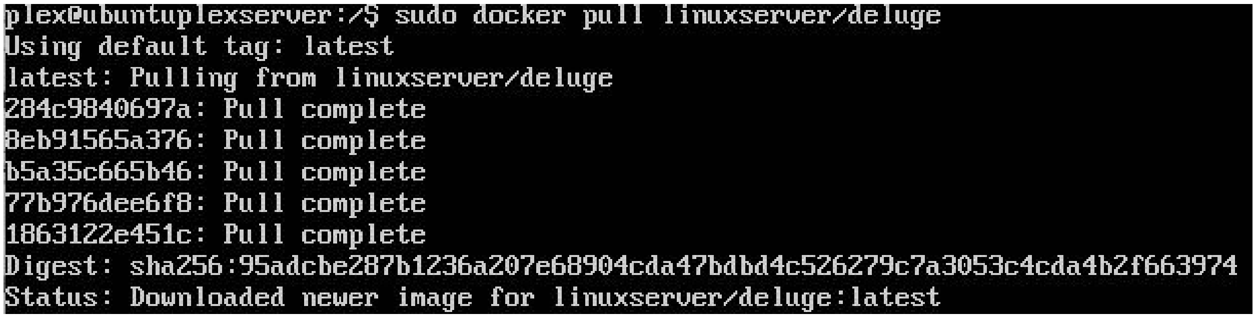
You can reach the container by opening your browser and going to http://localhost:6789. Or because we have assigned this server an IP address we could go to another computer and go to the site http://192.168.0.100:6789.

Deluge Docker Container Installation

https://hub.docker.com/r/linuxserver/deluge/
Deluge is a lightweight, Free Software, cross-platform BitTorrent client.

Step 1: Pull the Container

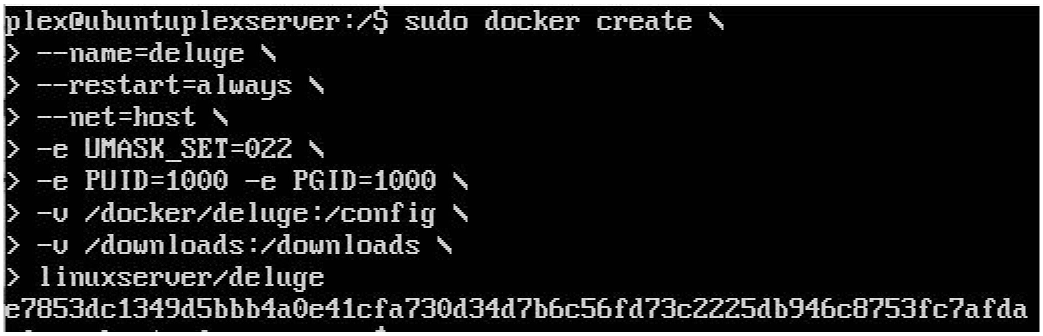
Type in `sudo docker pull linuxserver/deluge`



```
plex@ubuntuplexserver:/$ sudo docker pull linuxserver/deluge
Using default tag: latest
latest: Pulling from linuxserver/deluge
284c9840697a: Pull complete
8eb91565a376: Pull complete
b5a35c665b46: Pull complete
77b976dee6f8: Pull complete
1863122e451c: Pull complete
Digest: sha256:95adcbe287b1236a207e68904cda47bdbd4c526279c7a3053c4cda4b2f663974
Status: Downloaded newer image for linuxserver/deluge:latest
```

Step 2: Type or copy/paste in

```
sudo docker create \
      --name=deluge \
      --restart=always \
      --net=host \
      -e UMASK_SET=022 \
      -e PUID=<user pid> -e PGID=<group id>\
      -v <path you would like the config file in>:/config \
      -v <path to downloads directory>:/downloads \
      linuxserver/deluge
```

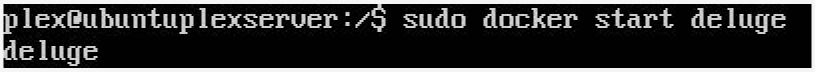


```
plex@ubuntuplexserver:/$ sudo docker create \
> --name=deluge \
> --restart=always \
> --net=host \
> -e UMASK_SET=022 \
> -e PUID=1000 -e PGID=1000 \
> -v /docker/deluge:/config \
> -v /downloads:/downloads \
> linuxserver/deluge
e7853dc1349d5bbb4a0e41cfa730d34d7b6c56fd73c2225db946c8753fc7afda
```

The image above is an example of what mine looks like fully filled out with the locations that I am using on my server. You will need to create the directories that you are using for the config, tv and downloads.

Step 3: Start the Container

Type in `sudo docker start deluge`



```
plex@ubuntuplexserver:/$ sudo docker start deluge
deluge
```

Step 4: Access the Container

You can reach the container by opening your browser and going to http://localhost:8080. Or because we have assigned this server an IP address we could go to another computer and go to the site http://192.168.0.100:8080.

Watchtower Docker Container Installation

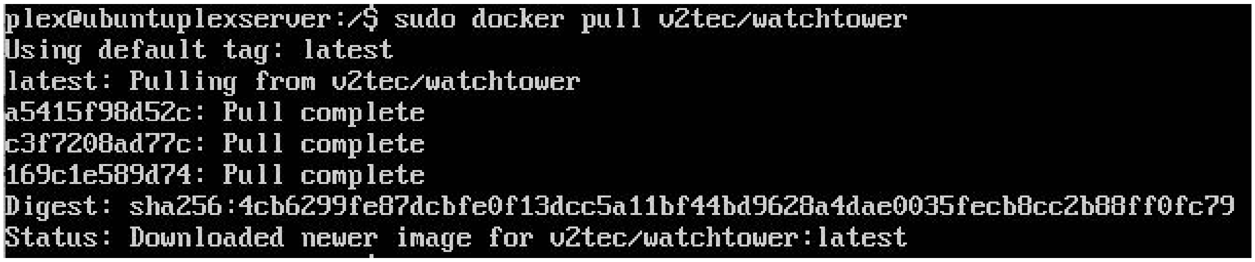
https://github.com/v2tec/watchtower

Watchtower is an application that will monitor your running Docker containers and watch for changes to the images that those containers were originally started from. If watchtower detects that an image has changed, it will automatically restart the container using the new image.

With watchtower you can update the running version of your containerized app simply by pushing a new image to the Docker Hub or your own image registry. Watchtower will pull down your new image, gracefully shut down your existing container and restart it with the same options that were used when it was deployed initially.

Step 1: Pull the Container

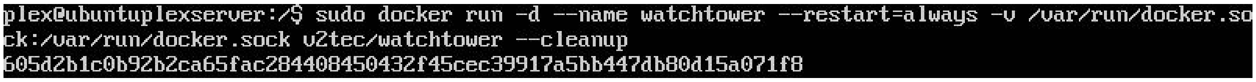
Type in `sudo docker pull v2tec/watchtower`



```
plex@ubuntuplexserver:/$ sudo docker pull v2tec/watchtower
Using default tag: latest
latest: Pulling from v2tec/watchtower
a5415f98d52c: Pull complete
c3f7208ad77c: Pull complete
169c1e589d74: Pull complete
Digest: sha256:4cb6299fe87dcbfe0f13dcc5a11bf44bd9628a4dae0035fecb8cc2b88ff0fc79
Status: Downloaded newer image for v2tec/watchtower:latest
```

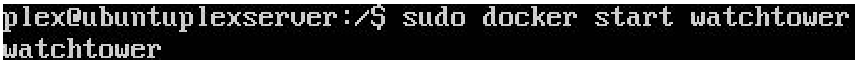
Step 2: Type or copy/paste in

Type in `sudo docker run -d --name watchtower --restart=always -v /var/run/docker.sock:/var/run/docker.sock v2tec/watchtower --cleanup`



```
plex@ubuntuplexserver:/$ sudo docker run -d --name watchtower --restart=always -v /var/run/docker.so
ck:/var/run/docker.sock v2tec/watchtower --cleanup
605d2b1c0b92b2ca65fac284408450432f45cec39917a5bb447db80d15a071f8
```

Step 3: Start the Container



```
plex@ubuntuplexserver:/$ sudo docker start watchtower
watchtower
```

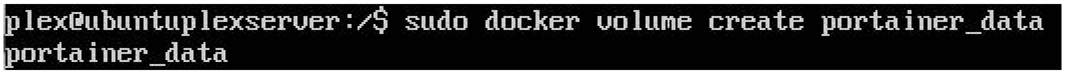
Portainer Docker Container Installation

https://portainer.io/

Portainer is an open-source lightweight management UI which allows you to easily manage your docker hosts or swarm clusters.

Step 1: Create a Volume

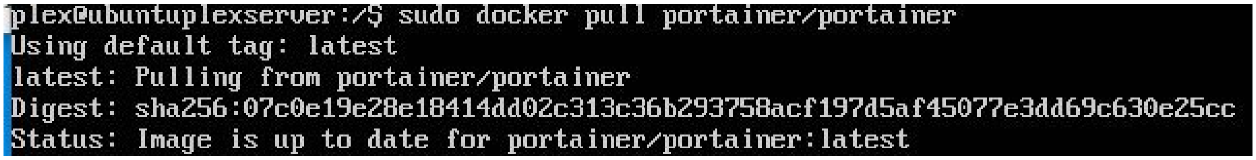
Type in `sudo docker volume create portainer_data`



```
plex@ubuntuplexserver:/$ sudo docker volume create portainer_data
portainer_data
```

Step 2: Pull the Container

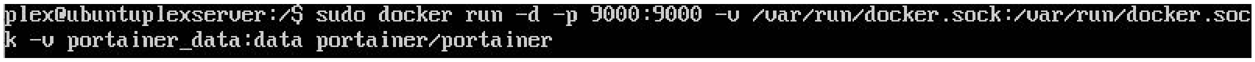
Type in `sudo docker pull portainer/portainer`



```
plex@ubuntuplexserver:/$ sudo docker pull portainer/portainer
Using default tag: latest
latest: Pulling from portainer/portainer
Digest: sha256:07c0e19e28e18414dd02c313c36b293758acf197d5af45077e3dd69c630e25cc
Status: Image is up to date for portainer/portainer:latest
```

Step 3: Run the Container

Type in `sudo docker run -d -p 9000:9000 -v /var/run/docker.sock:/var/run/docker.sock -v portainer_data:data portainer/portainer`



```
plex@ubuntuplexserver:/$ sudo docker run -d -p 9000:9000 -v /var/run/docker.sock:/var/run/docker.soc
k -v portainer_data:data portainer/portainer
```

Step 4: Access the Container

You can reach the container by opening your browser and going to http://localhost:9000. Or because we have assigned this server an IP address we could go to another computer and go to the site http://192.168.0.100:9000.